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This phenomenon, which is based on essential functions of microbes, namely, those of nutrition and self-preservation, has found practical medical application in the diagnosis of some infectious diseases. The antagonism between yeast and bacteria has long been used in practical medicine. Yeast is used successfully in treating a number of infections caused by staphylococci. Lysins active against staphylococci and the causative factors of typhoid, paratyphoid A and B, and tuberculosis, as well as against other bacteria have been obtained from yeast. The opposite phenomenon is also observed: bacteria may become antagonists of yeast. In other words, enforced antagonism is a biologically reversible property.

The principle involved permits the transformation of any microbe into the antagonist of another. If we place yeast and bacteria into an aqueous solution of glucose, yeast develops. On the other hand, if we place yeast and bacteria into a nutrient medium devoid of sugar, the bacteria develop at the expense of yeast, using the yeast as food.

Cultivation of bacteria on yeast is used for diagnostic purposes. In a medium devoid of sugar, tuberculosis bacilli grow on yeast. This method permits us to obtain cultures of tuberculosis bacilli in many cases of tuberculous infection and to set a correct diagnosis in this manner.

Natural or enforced antagonism may be either monovalent or divalent, may have either an intraspecies or an interspecies character, may be either functional or nonfunctional, etc.

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